

NO_x, Hg, AND SO₂ REMOVAL USING AM- MONIA

Abstract

A process and apparatus for removing SO₂, NO, and NO₂ from a gas stream having the steps of oxidizing a portion of the NO in the flue gas stream to NO₂, scrubbing the SO₂, NO, and NO₂ with an ammonia scrubbing solution, and removing any ammonia aerosols generated by the scrubbing in a wet electrostatic precipitator. The process can also remove Hg by oxidizing it to HgO and removing it in the wet electrostatic precipitator. Ammonium sulfate, a valuable fertilizer, can be withdrawn from the scrubbing solution.